

REMARKS

Summary of the Office Action

Claims 1-7 and 10-13 stand rejected under 35 U.S.C. §102(e) as being anticipated by Nishimura (US 2001/0002829).

Claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishimura in view of Applicants' Prior Art FIGs. 1-5.

Claims 14 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishimura.

Summary of the Response to the Office Action

Applicants have amended independent claims 1 and 11, and canceled claims 10 and 13. Accordingly, claims 1-9, 11, 12, 14, and 15 are pending for further consideration.

All Claims Define Allowable Subject Matter

Claims 1-7 and 10-13 stand rejected under 35 U.S.C. §102(e) as being anticipated by Nishimura (US 2001/0002829), claims 8 and 9 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishimura in view of Applicants' Prior Art FIGs. 1-5, and claims 14 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Nishimura.

Applicants respectfully traverse these rejections as being based upon references that neither teach nor suggest each feature now recited in independent claims 1 and 11.

Independent claim 1, as amended, recites a liquid crystal display including a first data polarity inversion driver determining whether a first data transition is occurred in first data of input data and a second data polarity inversion driver determining whether a second data transition is occurred in second data of the input data, "wherein the first data is odd-numbered bits in the input data and the second data is even-numbered bits in the input data." Similarly,

independent claim 11 recites a method of driving a liquid crystal display including “dividing input data by first and second data,” wherein “the first data is odd-numbered bits of the input data and the second data is even-numbered bits of the input data.”

In contrast to the Applicants’ claimed invention, and contrary to allegations made by the Office Action, Nishimura actually teaches, in paragraph [0038], that each data BUS-A1 to A24 is connected to odd-numbered SD3-1, 3, 5, 7, and 9 among SD3-1 through SD3-10 through respective 24-bit width bus lines. In addition, Nishimura actually teaches, in paragraph [0039], that each data BUS-C1 to C24 and BUS-D1 to D24 are connected to even-numbered SD3-1, 4, 6, 8, and 10 among SD3-1 through SD3-10 through respective 24-bit width bus lines. Thus, Nishimura does not teach dividing input data into odd data and even data. Accordingly, Applicants respectfully assert that Nishimura fails to teach or suggest a liquid crystal display including a first data polarity inversion driver determining whether a first data transition is occurred in first data of input data and a second data polarity inversion driver determining whether a second data transition is occurred in second data of the input data, “wherein the first data is odd-numbered bits in the input data and the second data is even-numbered bits in the input data,” as recited by independent claim 1, and hence dependent claims 2-9. Similarly, Applicants respectfully assert that Nishimura fails to teach or suggest a method of driving a liquid crystal display including “dividing input data by first and second data,” wherein “the first data is odd-numbered bits of the input data and the second data is even-numbered bits of the input data,” as recited by independent claim 11, and hence dependent claims 12, 14, and 15.

Moreover, in further contrast to Applicants' claimed invention, which teaches a 6-bus driving system, and further contrary to the allegations made in the Office Action, Nishimura actually teaches, in paragraphs [0061] to [0069], performing data inversion in 24-bit units, i.e., 8-bit R data, 8-bit G data, and 8-bit B data. However, the Office Action alleges that it would have been obvious to "allow fewer input data bits to be driven to the display, as suggested by Nishimura in order to thereby provide a liquid crystal display device wherein the amount of change of data output causes a reduction in power consumption in the drive circuit of the liquid crystal display and an improvement in the EMI characteristics of the liquid crystal display device." Applicants respectfully disagree.

As MPEP 2143.01 instructs, "[t]he mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990)." Accordingly, because the prior art does not teach or suggest any motivation to perform the data inversion of Nishimura using any "reduced bit" units, ie., 18-bit units of 9-bit first data and 9-bit second data, or in 12-bit units of 6-bit odd data and 6-bit even data, Applicants respectfully assert that the Office Action has not established any proper motivation to modify Nishimura, and thus not established a *prima facie* case of obviousness.

For at least the above reasons, Applicants respectfully submit that independent claims 1 and 11 are neither taught nor suggested by Nishimura and/or Applicants' Prior Art FIGs. 1-5, whether taken alone or in combination. Thus, Applicants respectfully assert that the rejections under 35 U.S.C. §§ 102(e) and 103(a) should be withdrawn because the above-discussed novel combination of features are neither taught nor suggested by any of the applied references.

Conclusion


In view of the foregoing amendments and remarks, Applicants respectfully request entry of the above amendments, reconsideration, and the timely allowance of the pending claims. Should the Examiner believe that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicants' undersigned representative to expedite prosecution.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS

By: _____


David B. Hardy
Reg. No. 47,362

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Customer No. 09629
MORGAN, LEWIS & BOCKIUS
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
Telephone: 202-739-3000